Atlantic Richfield Company

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August 5, 2010

CERTIFIED - RETURN RECEIPT REQUESTED

Ms. Nadia Hollan Burke Remedial Project Manager U.S. Environmental Protection Agency Region 9 75 Hawthorne Street, SFD-8-2 San Francisco, CA 94105

Subject:

July 2010 Monthly Report, Yerington Mine Site, Lyon County, Nevada: Administrative Order for Remedial Investigation and Feasibility Study (RI/FS), EPA Docket No. 9-2007-0005; Administrative Order on Consent, EPA Docket No. 09-2009-0010

Dear Ms. Hollan Burke:

Pursuant to the above referenced orders issued by the U.S. Environmental Protection Agency - Region 9 (EPA), Atlantic Richfield Company (ARC) has prepared the following monthly report for RI/FS and removal action activities at the Yerington Mine Site (Site) during July 2010.

July 2010 Activities

Site O&M and Security

- Continued routine Site O&M, security and bird deterrent activities including operation of the
 propane cannons for the Arimetco ponds (with the exception of the VLT Pond). Given that the
 PWS evaporation pond is dry, USFWS approved a shut down of the bird guard towers, which
 occurred during the week of July 26. Continued the revised bird mitigation schedule that includes
 a ten-minute stop at each of three designated observation points, three times per day.
- PWS evaporation pond levels: North Cell 0.0 feet; Middle Cell = 0.0 feet; South Cell 0.0 feet.
- Arimetco heap leach fluid management system (FMS): 1) total estimated gallons transferred from VLT Sediment Pond (VLTSP) to the FMS Evaporation Pond = approximately 172,500 gallons; Slot Sediment Pond (SSP) to the FMS Evaporation Pond = approximately 287,000 gallons. Phase 1 Pond to FMS Evaporation Pond = 24,000 gallons. Approximately 459,500 gallons were transferred into the FMS pond in July; 2) Pond levels: Phase 1 Pond = 1.0 feet; FMS Evaporation Pond = 6.25 feet; VLT Pond = 10.25 feet; Slot 2 Pond = 13.25 feet.
- Per the revised FMS O&M Plan, system improvements have been made to measure flow rates and volumes of fluids in ponds and during batch pumping operations, and two leak detection sumps (see attached information).
- No measurable precipitation was recorded.
- Continued monitoring the evaporation pan located near PW6.
- Completed the installation of new 15 MPH speed limit signs at the main gate and near the truck shop to reduce potential driving hazards in this area.
- Completed repairs of the generator, including replacement of tires and batteries.



Ms. Nadia Hollan Burke Yerington Monthly Report August 5, 2010 Page 2 of 4

July 2010 Activities - Continued

Other Site Activities

- EPA and Environmental Quality Management (EQM) personnel completed their evaluation of the evaporation enhancements on July 9.
- EPA, NDEP and CH2MHill personnel reviewed the condition of FMS facilities on July 28.

Site Characterization

- Site-wide monthly groundwater elevation measurements were obtained July 26-28.
- A pit lake water elevation of 4221.51 feet amsl was recorded on July 30, 2010 from the pressure transducer, a decrease of 0.472 feet since June 30, 2010. The pit lake elevation has risen 2.923 feet since July 30, 2009.
- Continued meteorological monitoring at the AM-6 location including wind speed/direction, temperature, relative humidity, barometric pressure, precipitation and solar radiation.
- Provided a track changes version of the revised CSM and responses to EPA and YPT comments.
- Of the 10 residences/owners with domestic wells who became eligible for the bottled water program based on 1Q or 2Q 2010 domestic well monitoring data, and were contacted via registered mail, six residences/owners have not responded and four residences/owners have accepted (DW-148, -157, -164 and -176) and were placed on the bottled water program.
- Submitted a revised Domestic Well Monitoring Plan (DWMP Revision 3) on July 1.
- Continued the 2010 monitor well program (see attached progress update): 1) monitor wells B/W-33B, B/W-33D, B/W-54B, B/W-61B and W4CB-2B were installed; 2) 26 zonal groundwater samples were collected from five boreholes; 3) lab data for six aquifer solids samples were received; and 4) three groundwater samples from geoprobe sampling were collected, all accessible geoprobe locations were completed and surveyed with a Trimble GeoXT GPS unit. A fourth sonic core drill rig was mobilized to the Site on July 20.
- The truck shop was cleaned and rearranged to accommodate improved drill core storage and viewing.
- Discussed EPA comments on the 2010 Monitor Well and Ag Fields Work Plans with EPA in a teleconference on July 15. Submitted responses to comments and the revised (Revision 2) 2010 Monitor Well and Ag Fields Work Plans on July 22 and 20, respectively.
- Continued the analysis of aquifer test data, and initiated the summary of the results.
- Continued work on the Draft Process Areas Vadose Zone and Groundwater Characterization Work Plan.
- Initiated a review of the draft EPA/CH2M Hill Site History Report.
- Continued routine database management activities.
- Continued Site wildlife surveys, data management and wildlife observation reports.

AOC Removal Actions

- Submitted the draft Process Areas Radiological Materials Removal Action Plan on July 6. Boundaries for impacted soils areas to be excavated were surveyed and staked.
- EPA and NDEP inspected the Electrical Hazards Removal Action work on July 9.
- Attended a Technical Meeting to discuss the Evaporation Ponds Removal Action and Cover Materials Work Plan on July 15. Submitted the VLT XRF Data Summary Report on July 23.
- Completed the evaluation of, and installed, flow monitoring equipment for the FMS. Submitted the revised FMS O&M Plan on July 16.
- Continued discussions with EPA regarding the Transite Pipe Removal Action Plan, and submitted responses to EPA comments and the revised Removal Action Plan (RAP - Revision 1) on July 30. The revised RAP included responses to EPA comments on the draft Supplemental Scale Sampling and Analysis Plan (SAP), and the revised SAP (Revision 1) as an appendix.
- Repaired, and ordered parts for, inactive air quality monitoring stations to be used in support of the 2010 removal actions.

Planned August/September 2010 Activities

Site Characterization

- Continue Site wildlife surveys, maintenance of wildlife observation data and preparation of wildlife observation reports.
- Continue groundwater elevation and pit lake level monitoring. Continue meteorological monitoring at AM-6.
- Continue compilation of 2Q 2010 monitor well and domestic well data. Submit the 2Q 2010 monitor well and domestic well reports in September.
- Provide updates to EPA for domestic well access agreements, as needed.
- Submit a final Aquifer Solids Work Plan.
- Continue ongoing groundwater investigations, and add a fifth drill rig to expedite the schedule.
- Submit a technical memorandum on the aquifer test results for EPA review, and discuss with EPA the next steps described in the PWS Characterization Work Plan Addendum dated February 17, 2020.. Initiated particle tracking and numerical modeling, if required, per EPA direction.
- Meet with EPA on August 31 to discuss additional monitor wells to be installed to assess background conditions and potential past or current sources of contaminants on the Site.
- Continue borehole drilling, zonal sampling and monitor well installations pursuant to the revised 2010 Monitor Well and Ag Fields Work Plans.
- Submit the revised Process Areas Vadose Zone and Groundwater Characterization Work Plan.

AOC Removal Actions

- Continue routine O&M, site security, and bird deterrent activities.
- Conduct geochemical and geotechnical characterization activities for the mineral salt precipitates and sub-grade materials, respectively, in the north cell of the PWS evaporation pond.
- Continue flow monitoring and water balance calculations for the Arimetco FMS, and implement other elements of the revised FMS O&M Plan.
- Conduct geotechnical and geochemical characterization of sub-grade materials (mineral salt precipitates and native materials) within the north cell of the PWS evaporation pond upon receipt of EPA comments on the geochemical sampling approach.
- Continue contractor procurement for the 2010 removal actions (Thumb Pond and Sub-Area A interim covers; transite pipe removal; Process Areas radiological materials removal), and meet with EPA as necessary to discuss these removal action.
- Pending EPA approval, initiate the field work described in the draft Cover Materials Work Plan.

If you have any questions or comments, please contact me at (714) 228-6774 or via e-mail at jack.oman@bp.com.

Sincerely,

Jack Oman Project Manager Ms. Nadia Hollan Burke Yerington Monthly Report August 5, 2010 Page 4 of 4

Dave Seter, EPA - via electronic mail cc: Jacquelyn Hayes, EPA - via electronic mail Svetlana Zenkin, EPA - via electronic mail Roberta Blank, EPA - via electronic mail Jere Johnson, EPA - via electronic mail Andrew Helmlinger, EPA - via electronic mail Tom Dunkelman, EPA - via electronic mail Joe Sawyer, NDEP - via electronic mail Tom Olsen, BLM - via electronic mail Dan Newell, City of Yerington - via electronic mail Phyllis Hunewill, Lyon County Commissioner – via electronic mail Dennis Stark, Lyon County Manager - via electronic mail Richard Faber, Lyon County Facilities Engineering - via electronic mail Tom Grady, Nevada State Assembly - via electronic mail Justin Whitesides, YPT - via electronic mail Chairman Emm, YPT - via electronic mail Dietrick McGinnis, McGinnis and Associates - via electronic mail Tom Bowden, Ridolfi, Inc. - via electronic mail Chairman Sammaripa, WRPT – via electronic mail Roxanne Ellingson, WRPT - via electronic mail Ron Halsey, Atlantic Richfield Company - via electronic mail James Lucari, Atlantic Richfield Company – via electronic mail Steve Dischler, Atlantic Richfield Company - via electronic mail Robin Bullock, Atlantic Richfield Company - via electronic mail Shannon Dunlap, Atlantic Richfield Company – via electronic mail Don Pratt, Atlantic Richfield Company - via electronic mail John Batchelder, EnviroSolve - via electronic mail Jim Chatham, Atlantic Richfield Company - via electronic mail Rich Curley, Curley and Associates, LLC - via electronic mail David Peri. Peri and Sons - via electronic mail Ken Greene, CH2M Hill - via electronic mail Victor Early, Tetra Tech - via electronic mail Colin Lee, Tetra Tech – via electronic mail Peggy Pauly, YCAG - via electronic mail Lyon County Library System Central